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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,286	03/18/2004	Manoj Kumar Singhal	15473US01	5666

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EXAMINER

MONIKANG, GEORGE C

ART UNIT	PAPER NUMBER
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2614

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04/28/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,286	Applicant(s) SINGHAL ET AL.	
	Examiner GEORGE C. MONIKANG	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/8/2009 with respect to the rejection(s) of claim(s) 1-15 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Boillot et al, US Patent 20040267540 A1 and Hala et al, US Patent 6507804 B1.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-5 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court Precedent and recent Federal Circuit decisions indicate that a statutory "process" under 35 U.S.C. 101 must be tied to another statutory category (such as a particular apparatus) or transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claims recites a series of steps or acts to be performed, the claim neither transforms underlying subject matter nor is positively tied to another statutory category that accomplishes the claimed method steps, and therefore does not qualify as a statutory process. For example the method including the step of slowing down, receiving, retrieving, generating, applying and converting is of sufficient breadth that it

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would be reasonably interpreted as a series of steps completely performed mentally, verbally or without a machine.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4-7, 9-12 & 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Boillot et al, US Patent 20040267540 A1.

. Re Claim 1, Boillot et al discloses a method for slowing down an encoded original audio signal (para 0033), said original audio signal having an original frequency and original playback speed (para 0033: previous pitch & speed before it is adjusted), said method comprising: receiving the encoded original audio signal (para 0047, claim 3: audio samples consisting of frames are sent through a vocoder); retrieving frames of the original audio signal (para 0085: oldwin comprises frames of the original audio sample); generating replicated frames for playback at a desired rate (para 0033: playback device such as digital message service or tape recorder, replicates the audio frames and plays them back at a desire slower rate), wherein said replicated frames comprise the frames of the original audio signal, wherein at least some of the frames of the original audio signal are repeated (para 0085: oldwin comprises frames of the

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original audio sample is merged with newin which comprises frames of the newly duplicated audio sample), applying a window function to the replicated frames (para 0085: oldwin comprises frames of the original audio sample is merged using SOLA with newin which comprises frames of the newly duplicated audio sample; this merging is to smooth out/windowing the playback to avoid distortions which is what the window function does); converting the signal with the windowed replicated frames from digital to analog format (para 0070: the signal is converted to an analog signal before it is played back through the speakers); and using the original frequency to playback the analog format signal (para 0033: playback speed is adjusted without changing the pitch/frequency).

Re Claim 2, Boillot et al discloses the method according to claim 1 wherein the encoded original audio signal is encoded in the frequency domain using one of a plurality of encoding schemes (para 0047, claim 3: audio samples consisting of frames are sent through a vocoder where audio frames are encoded then decoded using one of any encoding/decoding schemes), the method further comprising frequency-domain decoding of the encoded original audio signal (para 0047, claim 3: audio samples consisting of frames are sent through a vocoder where audio frames are encoded then decoded using one of any encoding/decoding schemes).

Re Claim 4, Boillot et al discloses the method according to claim 1 wherein the desired playback speed is a predefined default value (para 0037: user's preferred speaker rate is predefined and stored).

Re Claim 5, Boillot et al discloses the method according to claim 1 wherein the desired playback speed is a programmable value (para 0037: the predefined parameter can be set by a user).

Claim 6 has been analyzed and rejected according to claim 1.

Claim 7 has been analyzed and rejected according to claim 2.

Claim 9 has been analyzed and rejected according to claim 4.

Claim 10 has been analyzed and rejected according to claim 5.

Claim 11 has been analyzed and rejected according to claim 1.

Claim 12 has been analyzed and rejected according to claim 2.

Claim 14 has been analyzed and rejected according to claim 4.

Claim 15 has been analyzed and rejected according to claim 5.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 8 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boillot et al, US Patent 20040267540 A1 as applied to claim 2 above, in view of Hala et al, US Patent 6507804 B1.

Re Claim 3, Boillot et al discloses the method according to claim 2 wherein said decoding comprises: decoding said encoded signal using a decoding scheme corresponding to said one of a plurality of encoding schemes (*Boillot et al, para 0047, claim 3: audio samples consisting of frames are sent through a vocoder where audio frames are encoded then decoded using one of any encoding/decoding schemes*); but fails to disclose applying an inverse transform to an audio signal; and applying an inverse window function as taught in Hala et al (*Hala et al, col. 17, lines 33-54*). It would have been obvious modify the Boillot et al reference with an inverse transfer function (*Hala et al, col. 17, lines 33-54: inverse FFT*) and an inverse window (*Hala et al, col. 17, lines 33-54: inverse window*) after the window function (*Hala et al, col. 17, lines 33-54*) for the purpose of reducing inconsistencies in the windowed audio frames.

Claim 8 has been analyzed and rejected according to claim 3.

Claim 13 has been analyzed and rejected according to claim 3.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE C. MONIKANG whose telephone number is

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(571)270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George C Monikang/
Examiner, Art Unit 2614

1/8/2009

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2614